**CE599 Instructional Technician Specialist K-12 Internship**

**I. Knowing the Content**

The professional education program provides evidence that Instructional Technology Specialist certification candidates complete a program at a bachelor’s or post-baccalaureate degree level that requires them to demonstrate their knowledge of and competence in the application of instructional technology in public school settings. The program requires candidates to demonstrate an understanding of the fundamental and advanced concepts of instructional technology planning and applications at elementary, middle, and secondary levels (K-12) including:

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| **PDE Requirements** | **Proposed Activities:** | **Hours** |
| **I.A. Identification, selection, installation and maintenance of technology infrastructure, and hardware and software applications for school administration and instruction including:**   * Assessment of educational and administrative technological needs * Design and production of media including projected and non-projected visual aids, audio and video production in both analog and digital forms, and photography using film-based and digital formats * Implementation and maintenance of interactive information systems, the Internet, distance learning technologies, and networks * Assistive technology resources for students with special needs * Evaluation of the performance of hardware and software components of computer systems * Application of basic troubleshooting strategies | **Design a needs assessment of our Administrative team to guide Professional Development for the 12-13 school year.**  *Administrative team questions: What are the District’s short and long-term goals in PD? What is currently being done for PD? What are the teaching and learning problems the SD is facing? Are teachers being involved in tech development? (*[*SLSD Ed Tech Plan*](http://slsd.org/files/filesystem/Ed%20Tech%20Plan.pdf) *p. 51.)*  *Utilizing Dr. Amankwatia’s evaluation document,* [*School Principal & Administrator Technology Integration & Training Needs Interview Protocol*](Principal_AdminIntervu-Protocol.doc)*, survey a representative sample of administration about technology training and support in SLSD. This questionnaire helps establish a baseline of data and guideline for PD for 2012-13.*  **Using Jing screen recording software, provide educational tutorials for various District supported software.**  *What School District supported software is already available and what tutorials are needed? The tutorials can help guide PD for 2012-13. The tutorials could also be for assistive technology for Special Ed and Internet safety. See* [*Jing tutorials*](http://www.techsmith.com/tutorial-jing.html)*.*  **Work with Director of Special Ed, Andrea Buchman, to determine the needs of SLSD Learning support population and work to identify Assistive Technologies that might benefit the District.**  *Meet with Director of Special Education: What are the needs of the learning support population? Which assistive technologies are already in use? How are unmet needs supported? Ken suggested utilizing more fully the* [*built in features of Apple computers*](http://atlaak.org/index.php?option=com_content&view=article&catid=41%3Aca-technology-information&id=120%3Amac-built-in-features&Itemid=54&showall=1)*. What about* [*VoiceThread*](http://voicethread.com/)*? Show Andrea my document on* [*Apple assistive technologies*](Universal%20Access%20on%20Apple%20Computers.docx)*.* | **10**  **10**  **15** |

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| **I.B. Integrating technology into curricular planning and instructional design including:**   * Research on and evaluation of existing and emerging technologies * Use of instructional theories and teaching models * Learner characteristics, developmental levels, and individual differences as related to instructional technology resources and modifications * Access and use telecommunications for information sharing, remote information access and retrieval, and multimedia/hypermedia publishing * Electronic mail and Internet resources for communications and instructional support | **Work with Building Level Technology Coaches and Facilitators to monitor student and teacher use of technology. Posted observation recommendations will be provided to teachers in the use of their technology.**  *Meet with Building Level Technology Coaches and Facilitators:**Does SLSD have an observation chart that would monitor teacher and student use of technology?* *Dr. Amankwatia offered the use of a validated and reliable instrument of observation from her doctoral dissertation, which was used in multiple school districts. I have a copy of her dissertation to obtain a copy of this survey.*  *After gathering data, post recommendations to teachers about their use of technology.*  **Assist in addressing help desk request remotely to troubleshoot and maintain software user accounts (management).**  *Meet with Help Desk: How do I access help desk? How can I assist help desk to troubleshoot users’ problems and maintain software accounts. In preparation, review use of Apple computers: http://www.apple.com/iwork/tutorials/#pages-outline* | **14.5**  **3 - 5** |

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| **I.C. Management and administration of technology programs at the building, district and regional levels including:**   * Planning and utilization of facilities including, budgeting, accounting, and program reporting, grantsmanship, personnel administration, and staff development * Preparing presentations for parents, administrators, school boards, and the public * Monitoring and evaluating technology plans | **After working with District administrators, prepare a presentation regarding the implementation of a ubiquitous computing environment at the High School.** *Contact SLSD District administrators about 1:1 implementation at high school. To prepare for this, read Dr. Amankwatia’s thesis on 1:1 computing. (Consider what needs to be in place. Review Ely’s Eight Conditions that Facilitate Successful Technology Implementations.) Find additional relevant research on the successful implementation of 1:1 computing. Prepare a presentation to complement published findings.*  *Work on pricing or some aspect of planning and budgeting with PD (i.e. availability of resources as found in* [*PD budget in Ed Tech Plan*](http://slsd.org/files/filesystem/Ed%20Tech%20Plan.pdf) *pp. 48 & 49.) Does SLSD have everything needed for PD? What more? What are the budgeting needs for Special Ed assistive technologies and help desk? Are internal and external evaluators needed and budgeted for? What does it cost to have an external to the board evaluating team from Lehigh Univ.?* | **4**  **4** |

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| **I.D. Research, problem solving and product development of technological applications including:**   * Basic principles of instructional design associated with the development of instructional technology materials * Emerging programming, authoring, and problem solving environments including team and collaborative projects such as on-line workgroups * Designing and publishing on-line documents that present information and include links to critical resources | **Create a guide for teachers on the use of wikis and blogs in the classroom.**  *Does the School District have any tutorials on this? Search district site. How many teachers have used blogs and wikis in their classes? This could be both a how-to-use as well as educational use guide for wikis and blogs. I will include information on Glogster since the SD already has purchased the software.*  **Create various documents that highlight successful practices in using computer in a ubiquitous computing environment to support learning. Publish these documents in various formats on the District website.**  *Research successful practices of 1:1 computers to support learning. Use Dr. A findings and research more. Publish findings.* *http://www.inspiration.com/sites/default/files/documents/How\_Digital\_Tools\_Prepare\_Students\_for\_the\_21st\_Century.pdf* | **5**  **5** |

**II. Performances**

The professional education program provides evidence that competencies and exit criteria for Instructional Technology Specialist certification candidates are assessed in coursework, field experiences, portfolios from previous employment and an internship. The program also provides evidence that the candidates demonstrate their knowledge of and competence in the delivery of instructional technology services that enhance administrative and teaching capabilities and improve student learning during a minimum of 75 hours of participation in sequential field experiences, practica, and an internship at diverse educational levels including:

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| **II.A. Managing instructional technology services including:**   * Creating an environment that fosters interest and growth in all aspects of technology * Establishing and maintaining rapport with all staff and students * Communicating high learning expectations * Creating a safe physical environment that is conducive to learning | **Assist in addressing help desk request remotely to troubleshoot and maintain software user accounts.**  *Meet with Help Desk. Find out how to access help desk. Learn how to troubleshoot users’ problems and maintain software accounts, then assist help desk. Resources like* [*Apple Support*](http://www.apple.com/support/) *and* [*Smart Technologies Support*](http://www.smarttech.com/us/Support/Browse+Support) *are a good resources to answer questions.* | **3 - 5** |

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| **II.B. Planning, preparation and delivery of technology related in-service programs and instruction in collaboration with other professionals at a variety of instructional levels that utilizes technology in problem solving based upon:**   * Pennsylvania Academic Standards * Strengths and needs of learners at all levels of technological proficiency * Established technology implementation plans | **Prepare face-to-face or online PD for various District supported software in assistive technology. (Teachers are required to complete various activities throughout the year.)**  *Meet with Special Ed: Find out which assistive technology software needs PD and then learn how to use it. Then prepare presentations on how to use some assistive technology software. What are the various activities teachers have to complete?*  *What is already available in MacBook Air that offers assisted technology, such as enlarging print, speech to text, etc. http://atlaak.org/index.php?option=com\_content&view=article&catid=41%3Aca-technology-information&id=120%3Amac-built-in-features&Itemid=54&showall=1* | **6 - 10** |

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| **II.C. Selecting, implementing and adapting technology to teaching methodologies, curriculum resources and administrative functions in collaboration with other educators and integrating a variety of software, applications, and learning tools.** | **Serve on the District software review committee.**  *Meet with District software review committee. Find out what software is used by the School District, and to what extent it is being used. If software is underutilized, recommend changes.* | **2** |

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| **II.D. Selecting, developing and administering assessments that utilize technological applications and involve multiple indicators of student progress and using technology to maintain records on student achievement.** | **Incorporate what is being done in assistive technology, PD, help desk, 1:1 computing, etc. Utilize Dr. Amankwatia’s assessment tool from her dissertation.** | **2 - 4** |

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| **II.E. Developing leadership techniques for working with all levels of the educational community and to manage and administer instructional technology programs at the building and district levels including:**   * Developing plans to assess the technological needs and resources, and to evaluate technology implementation and outcomes * Developing plans to configure computer/technology systems and related peripherals in laboratory, classroom clusters, and other instructional and administrative arrangements * Developing systems for the secure maintenance of student records | **Evaluate and summarize data collected from a teacher survey related to integration of technology in the district. Prepare an executive summary**  *Get a copy of the technology integration survey, then evaluate and summarize the data. Prepare a report based upon findings.*  **As part of our ubiquitous computing implementation at the High School, prepare a plan for student charging stations through the building and a process for students to report computer problems.**  *Find out how many existing charging stations the High School has for the current number of computers. Find out how many more computers will be purchased and the number of new stations that will require. Examine the available locations where these stations could be placed. Will the teachers and students have easy access to them? Does extra wiring need to be installed? How about the cost for wiring and the new carts? Since the cart use may be temporary, can they be rented?* | **10**  **3** |

**III. Professionalism**

The professional education program provides evidence that Instructional Technology Specialist

certification candidates demonstrate knowledge and competencies that foster professionalism in

school and community settings.

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| **III.A. Professional organizations, publications and resources** | **Proposed Activity**  **Make an annotated (how do these different resources help) resource list for 1:1, assistive tech, and Internet safety. This could include apple educators, assistive technology prof. resources, etc.** | **4 - 6** |

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| **III.B. Integrity and ethical behavior, professional conduct as stated in Pennsylvania’s Code of Professional Practice and Conduct for Educators; and local, state, and federal laws and regulations.** | **Demonstrate ethical behavior in meetings and all other activities required for the internship.**  *I attended my first SB meeting on April 30, where a 5:4 vote gave the district the go ahead to buy an additional 500 laptops that would bring the H.S. to a 1:1 ratio. This meeting was informative; I wrote my observations and insights on* [*SB Meeting 4/30/12*](Summary%20of%20SB%20%20Meeting,%20April%2030,%202012.docx)*.*  *I attended second SB meeting on May 7 where various agendas were discussed and voted upon. The two significant ones were the refinancing the AA bond and initial approval for buying new science text books for grades K – 8.**I introduced myself to the board and the few administrators who were present.* | **1.75**  **3** |

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| **III.C. Collaborating with school colleagues to enhance student, teacher and administrative capabilities and improve student learning** | **This is an ongoing and essential component of all the other activities listed in the proposal.** |  |

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| **III.D. Communicating effectively with parents/guardians, other agencies and the community at large to support learning by all students.** | **Create a webpage on the SLSD site to serve as a portal for Cyber safety related information. Who is responsible for website development?**  *The School District has existing documents on cyber bullying and safety in the* [*AUP*](http://slsd.org/files/filesystem/815%20Acceptable%20Use%20of%20Internet.pdf) *(see pp. 7, 11, & 19). Locate other District resources for cyber safety. Include links to all of these on the Cyber Safety Webpage.* | **Preparation 3 + web work creation ? = 5?** |